

DMAP Newsletter

Volume 3, Issue 2

Louisiana Department of Wildlife and Fisheries

October 2000



“First Deer”
Fort Handicap H.C.
Morehouse Parish

Colton Franklin
(Age 6)



Cammie Crowder
(Age 13)



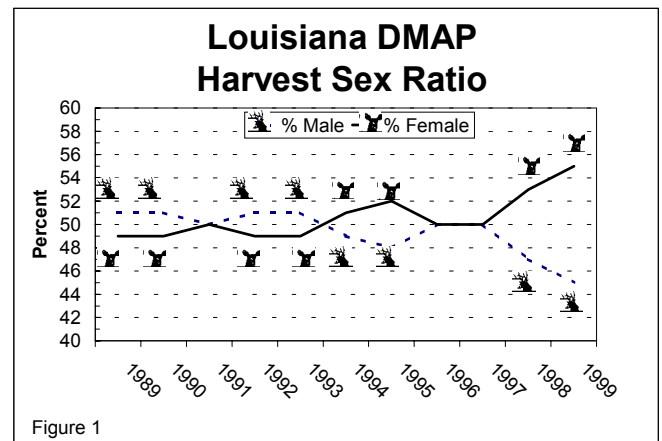
Jeffrey Dornak
(Age 9)

DMAP HARVEST 1999-2000

By: Larry Savage, LDWF DMAP Coordinator

DMAP participants (1,347) reported a harvest of 28,590 deer from 2.4 million acres, during the 1999-2000 hunting season. This is an average harvest rate of one deer for each 85 acres of habitat on DMAP lands.

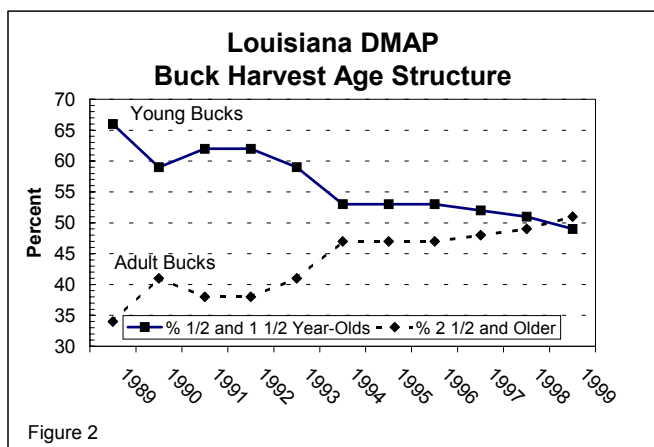
The sex ratio of the harvest was 45% males: 55% females. This is the 2nd year in a row that more does than bucks were harvested, indicating DMAP participants continue to make great strides with their management efforts (Figure 1).



The female harvest rate at 1 doe/155 acres was above the 11-year average (1 doe/173 ac.). In most cases, harvesting more females than males improves the overall deer herd health and balances the sex ratio at a more natural level. Both of these conditions help improve reproduction and fawn development (See Area 4, p. 5).

At 1 buck/188 acres, the buck harvest rate was below the 11-year average (1 buck/ 172 ac.).

Buck harvest rate declined the past two years for a couple of reasons. First, more DMAP units are selecting the quality buck management option and are voluntarily passing up young (fawns and yearlings) bucks. DMAP participants' harvest of young bucks has gone down steadily from 66% in 1989 to less than 50% this year (Figure 2). When DMAP began back in the early 1980's, young bucks made up 75 - 85% of the buck harvest.



The other factor was the unusually mild winter weather and its negative impact on hunting pressure and daylight buck movement. (See LOSC Weather Report, p. 13)

DMAP POSTING: MANDATORY FOR ALL COOPERATORS

By: Larry Savage, LDWF DMAP Coordinator

All landowners and hunting clubs participating in DMAP **must** be legally posted and identified with orange DMAP signs for the 2000-2001 hunting season. The Louisiana Wildlife and Fisheries Commission ratified the mandatory DMAP posting regulation at its regular September, 2000 meeting. Originally, DMAP signs had to be placed every 200 feet along the entire boundary of the DMAP unit for it to be legally posted. **Under the new rule the distance between signs has been increased to 1,000 feet.** Signs must also be

posted at every entrance to the property. Signs can be hand/shop-made if they are done to LDWF specifications (Title 76 Chapter 1 subsection 109):

- Material: metal, wood, plastic, paper, or other material
- Color: Orange
- Size: 11 ¼ in. X 11 ¼ in. (minimum)
- Lettering: The words DMAP and Posted can be no less than four inches in height.
- Additional wording: optional (such as Club name)

Listed below are commercial sign vendors that LDWF is aware of:

- Construction Safety Products, Inc., 359 Mt. Zion Rd., Shreveport, LA 71106 (318-688-6483 / 800-592-6940) (www.cspforestry.com)
- Kirste Inc., 401 Walnut St. Monroe, LA 71201 (318-322-6417)
- Minuteman Signs, 2915 Hwy 191, Logansport, LA 71049 (318-697-5004)
- Voss Signs, PO Box 553, Manlius, NY 13104-0553 (315-682-6418)

(Prices range from \$0.70-\$1.90 per sign depending on material and quantity ordered.)

ENCLOSED WITH THIS NEWSLETTER IS AN ORANGE FLYER REMINDING DMAP COOPERATORS OF RECENT RULE CHANGES. PLEASE POST IT WHERE ALL PERSONS HUNTING ON DMAP LANDS CAN READ IT DURING THE HUNTING SEASON.

Notice!!! Deadline for DMAP Fees October 1, 2000

Deer Season Forecast

By: David Moreland, Deer Research Study Leader

Both 1998 and 1999 had similar weather during the deer hunting season. The warm winter

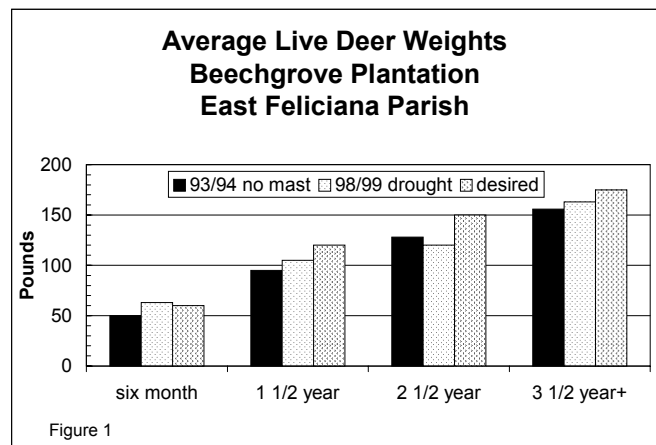
temperatures during these years made for poor deer movement and activity, which resulted in lower hunter success per effort. Even deer sightings are down on days when the temperature rises above sixty degrees. Deer are in their winter pelage and their activity slows down when temperatures reach this level. It is similar to someone wearing a winter jacket on a very warm day. If warm weather occurs during that time when the rut is taking place hunters really become perplexed and start believing they have finally killed all the deer.

According to the 1999/2000 Game Harvest Survey, there were 260,000 deer killed in Louisiana last year. This is an increase from the 1998 season. Less successful hunters may have done all their hunting around food plots and corn feeders and didn't venture into the woods. There was a good acorn crop in the state and deer generally prefer acorns to corn during the fall and winter season. The mild weather also kept the native browse in good shape so deer didn't have to visit the green patches as much as they do when the cold weather reduces the native browse.

The muzzleloader season was good last year with more deer being harvested with black powder rifles than bows and arrows. The deer harvest on the wildlife management areas was also up from 1998.

Hunters should expect to see good deer numbers in 2000. Many clubs and landowners are allowing younger bucks to get older and this should result in some nice trophy class bucks available for harvest this year. Usually during a slow season there is carry-over of deer from one season to the next since the poor deer movement reduces hunter success. The mild winter and early greenup allowed deer to achieve good body growth and antler development. There is some concern as to what the drought has done to the deer herds in the state. This is the third year for drought conditions in various parts of the state and no doubt it has created problems for some herds.

Data from a DMAP cooperator in East Feliciana was examined to compare weights of male deer harvested in 1999 following two summers of drought to the data collected in 1995 following two years of mast crop failure in 1993 and 1994. The two years of mast failure had a greater impact on body weights than the two years of drought conditions (Figure 1).

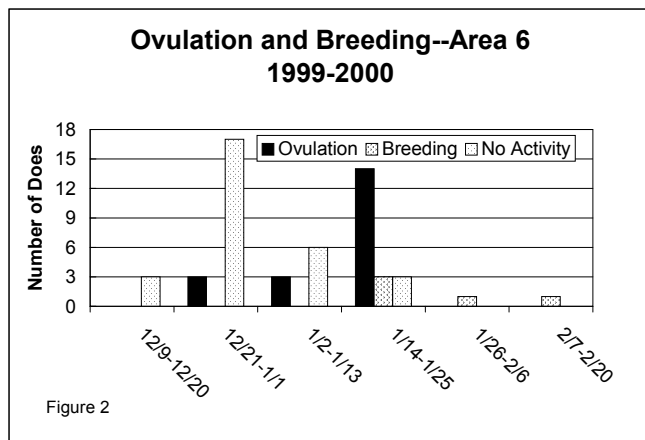


The Deer Study Section has been conducting herd health checks across the state. On these special collections biologists check for external and internal parasites. Stomach worms are identified and counted from the abomasum (fourth stomach) which provides insight into population densities. Kidney fat is measured and blood serum collected to test for the bluetongue virus.

These health checks have found a few problems, mainly on areas where deer numbers are kept at a high level. Hunters like to see deer when they go hunting but too many deer will create problems for both the herd and habitat. Low body weights and poor antler development are the main problems, but deer productivity can be affected. Problems were found in the upper portion of Area 6. Adult does were found carrying only a single fawn; on good habitat and with the herd in balance with the habitat adult does should produce twins and in some cases triplets. (See Area 4, p.5)

Good body weights and antler development

have been encountered in the agricultural regions along the Mississippi River. Areas where bucks are being selectively harvested exhibit excellent antler development and some nice deer were seen on some of these collections. Reproductive data from Area 6 indicates that the peak of breeding activity of these deer is in late January and extends into February (Figure 2). The breeding study will continue in Area 6 and a similar study is also being done in Area 2 by researchers at ULM.



A hunter's orange hat and vest is required when hunting on public lands such as the wildlife management areas and an orange hat is required when hunting on private land. I hope you have a productive deer season but at all times put safety first. Wear your hunter's orange, always check your guns, and use a safety belt.

DEER RESEARCH

Summarized by: Larry Savage, LDWF DMAP Coordinator

Southeastern United States

Four hundred deer biologists from across 16 southeastern states gathered at the 23rd annual Southeast Deer Study Group meeting in Wilmington, North Carolina on February 13, 2000. Presentation topics varied from *Animal Rights Threat to Managing Deer in Tomorrow's Forests* to *Use of Microsatellite DNA Markers to*

Determine Paternity and relatedness in Captive White-tailed Deer. LDWF's Deer Research Leader, David Moreland, presented a paper on *A User Friendly Browse Survey*, a method he has been developing the past couple of years. Below are summaries of two papers that may be of particular interest and use to deer hunters.

REMOTE MONITORING OF SCRAPING BEHAVIORS OF A WILD POPULATION OF WHITE-TAILED DEER. Clemson University graduate student, Karen Dasher, gave a final report on her study of six scrapes that were continuously monitored for two breeding seasons by motion-activated video cameras. This research was conducted on a 3,460 acre Georgia Piedmont property that was managed for quality (adult) bucks. Some of her basic findings were:

- Scrape marking by bucks occurred primarily during the pre-rut and rut.
- About 85% of buck visits and 75% of doe visits occurred after dark.
- Does visited scrapes more frequently than bucks. However, bucks interacted with scrapes more frequently than does. Does marked scrapes with their foreheads and mouths and were likely receiving breeding information about males in the area, as well as depositing scents.
- Many bucks of various ages marked the same scrape. Bucks 1.5 and 2.5-years old scraped at the same locations and same time periods as older males. The marking behavior of young bucks was not suppressed as had been suggested by some earlier studies done in deer pens.
- Bucks readily investigate scrapes without scent marking.

THAT NEW CAR SMELL: DEER RESPONSES TO TRADITIONAL AND NON-TRADITIONAL SCENTS IN MOCK SCRAPES. Ben Koerth and Dr. James Kroll from Stephen F. Austin State University conducted research with infrared-triggered cameras to determine if deer were attracted to scents used in mock scrapes as sexual

attractants or out of simple curiosity. Mock scrapes were constructed in areas typical for natural scrapes in Houston and Trinity Counties, Texas.

October 1 to December 5, 1998 – Mock scrapes were constructed with (1) rutting buck urine, (2) estrous doe urine, (3) human urine, and (4) no scent. This arrangement was repeated four times.

- All treatments received visits by deer
- Treatments receiving the most buck visits were rutting buck urine and human urine. There was no difference detected between the number and age of bucks checking out these mock scrapes.
- No difference was detected between the number of buck visits to mock scrapes with estrous doe urine and no scent.
- Primary interest in mock scrapes occurred about 2.5 weeks prior to normal peak rut and one week after.

1999 Beginning October 26th – Treatments of mock scrapes with (1) rutting buck urine, (2) estrous doe urine, (3) “new car” scent, and natural scrapes were repeated six times.

Preliminary data indicate:

- Deer readily visited all treatments regardless of scent used on mock or natural scrapes.
- Results indicate **scents used in conjunction with mock scrapes are eliciting curiosity behavior** and have little or no sexual attraction.

Louisiana

One of the questions most frequently asked by deer hunters is – “When does the peak rut occur in my hunting area?” The reason for their interest is obvious. Breeding date information is also very important to LDWF biologists for use in deer herd health evaluations, population dynamics studies, management recommendations, and evaluating hunting season frameworks.

LDWF and University of Louisiana--

Monroe researchers are conducting joint studies on deer breeding biology in two areas of the state. A two year study has just been completed in Area 4 (East Carroll, Morehouse, Ouachita, and Richland Parishes) and a similar Area 2 (piney woods in northwest LA) study is starting during the 2000-2001 hunting season. LDWF has also started a two-year study to determine breeding dates in Area 6 --Atchafalaya Basin.(See Deer Forecast, p.3)

DMAP units in all of these areas have played a vital roll in this research by collecting hunting season samples, providing access to their property and assisting LDWF personnel during special collections.

Area 4 (Northeast LA Bottomland)

A final report from the Area 4 study will appear in the next addition of the DMAP Newsletter. However, one preliminary finding is real good news. Ninety-three adult females (2.5 + years old) were examined in 1998-99 and 1999-00 from DMAP units that volunteered for the study. These does had a ratio of 1.8 fetuses/adult doe. This is excellent and comparable to the average of 1.9 fetuses/adult doe found in the Midwest agricultural region, one of the most productive deer herds in the nation.

High productivity of the Area 4 deer herd is due to the fertile Mississippi River alluvial soil, rich bottomland hardwood habitat, abundant agricultural crops, and quality deer management programs practiced by the DMAP units in this region. Most of the participating clubs have **quality bucks** as their management objective. Does are harvested at a relatively high rate (1.3 does/1 buck) and young bucks (fawns and yearlings) are protected. This strategy produces a healthy (physically and socially) deer herd that is in balance with the food supply. It has a more natural population structure with a balanced sex ratio and a larger adult buck component. A healthy deer herd is a productive deer herd and high fawn production is the key to successful deer

management, *regardless of your management objective.*



*Buck Visiting Scrape, Morehouse Parish, Area 4 Study
Photo courtesy of Dr. Kim Tolson, ULM, Dept. of Biol.*

Area 2 (Northwest LA Piney Woods)

The Area 2 breeding biology study will begin this hunting season. The opening date for the gun season in Area 2 has been moved to the first Saturday in November. This research project will establish peak breeding dates for deer and determine if this date provides the best hunting opportunity for clubs and landowners.

LDWF and ULM request the assistance of DMAP cooperators to collect reproductive tracts from does harvested this season. Cooperators that normally harvest 20 or more females a year will provide the best sample. ULM will provide the necessary information and materials that participants will need. A graduate student will examine these reproductive tracts to estimate breeding dates using embryo and/or fetus measurements. If you participate in this study you will be asked to collect additional information from does including live weight and age (jawbone).

Clubs that collect a large sample of reproductive tracts both years of the study will be able to accurately determine the peak rutting period specifically for their club. If you are interested in being part of this important deer study contact: David Moreland (225) 765-2344 or Larry Savage (225)-765-0823 or (318) 362-3160.

STATE TOP BUCKS SCORED 1999/2000

Gun – Typical Antlers

Score	Hunter	Location	Date
173 7/8	Dwayne Robertson	Grant P.	11/99
166 1/8	Jerry Hester	Red River P.	1/00
162 6/8	Elwood Shepherd	Bienville P.	12/99



Hester Buck



Waltman Buck

Gun – Non-Typical Antlers

181 4/8	Alvy Slatten	Red River P.	11/99
177 2/8	William Waltman	Red River P.	12/99

Muzzleloader

165 1/8	Timmy Sims	Claiborne P.	11/99
131 7/8	John W. Smith	E. Feliciana P.	11/99

Archery

154 2/8	Michael Pizzalato	W. Feliciana P.	1/90
149 6/8	Richard Ward, III	Pt. Coupee P.	11/99
141 0/8	Louis Mathews, Jr.	Tensas NWR	11/99
138 7/8	Michael Pizzalato	Sherburne WMA	1/91

Note: Some of the top Louisiana B & C, P & Y and state record bucks officially scored in 1999 & 2000.

*Look for DMAP under **Hunting**
Information on Our Web Page*

www.wlf.state.la.us

Some Top 1999-2000 DMAP Bucks



*Billy Cooper
Duncansby Towhead
E. Carroll Parish
240 lbs, 8 pt., 5 ½ yrs,
20" i.s., 6 ¼" bases,
26 ½" beams,
Anderson Tully Co.*



*Tim Screen
Woodlawn HC
W. Feliciana Parish
200 lbs, 20 pt ,
3 1/3 yrs, 16 ¼" i.s.,
6 3/8" bases,
22 ¾" beams*



*Paul Edmonson , 220 lbs, 10 pt., 4 ½ yrs, 16" i.s.,
6 ½" bases, 26" beams*

Clay Farms, Richland Parish (top and bottom)

*Billy Clay, 228 lbs, 10 pt., 3 ½ yrs, 18 ½" i.s.,
6"bases, 26" beams*



*Jay Luke, Lac Amelia HC, Avoyelles Parish, 240 lbs,
13 pt, 4 ½ yrs, 18" i.s., 6 ¼" bases, 22" beams*

*Jude Gremillion, Corbett HC, Avoyelles Parish,
242 lbs, 10 pt, 6 ½ yrs, 16 ½ " i.s., 6 ¼ bases, 23"
beams*



SOUTHEAST STATES DEER HARVEST 1998-99

Estimates of deer habitat, hunter participation, and deer harvest for 15 Southeastern states were presented at the 23rd annual Southeast Deer Study Group at Wilmington, North Carolina in February 2000. Louisiana ranks 10th in the amount of occupied deer habitat, 6th in total harvest and 4th in harvest rate (deer/sq. mi.).

State	Habitat (sq.mi.)	Number Hunters	Total Harvest	Harvest Deer/sqmi
GA	33,163	316,567	427,000	12.9
SC	21,920	180,000	250,000	11.4
MO	21,396	400,000	225,618	10.5
LA	26,562	177,800	243,400	9.2
WV	22,889	345,000	195,839	8.5
MD	8,766	87,000	73,570	8.4
AL	48,014	210,600	390,300	7.6
TN	25,770	225,508	155,675	6.0
NC	36,699	285,000	215,582	5.9
MS	31,250	161,650	276,361	5.8
VA	31,479	230,000	178,528	5.7
AR	44,677	250,000	179,225	4.0
KY	39,654	260,271	157,551	4.0
TX	129,592	515,389	392,573	3.0
FL	29,280	127,000	86,068	2.9

* Habitat size and harvest rates are expressed in square miles (sq. mi.) or by section (640 acres).

Visit the Department's Web Site

www.wlf.state.la.us

PVC FOOT

Iberville Parish deer hunter, Joel Bezet, became very excited when he spotted a spike buck 40 yards from his deer stand late in the 1998-1999 hunting season. Everything appeared to be normal about the 1.5-year-old buck as it walked to within 15 yards of the stand. The 13-year-old hunter

harvested it in the last few minutes of shooting light. In his excitement, Joel didn't notice anything unusual about the deer while loading it in the boat for the ride back to Jack Miller landing. Examining the deer at home in the light, Joel was very surprised to find a white plastic (PVC) band around its left front leg between the hoof and the dew-claws. Although the deer did not limp, it appears from the photo, that it was only a matter of time and additional body growth before the condition became a serious handicap.



After seeing Joel's deer, a friend claimed to have seen a spike buck earlier with something white on his foot on the Shell Road Club, seven miles north of the Village Hunting Club where Joel killed his deer. This is possible, since yearling bucks often disperse from their fawning range into unknown territory. And like teenagers, they are accident-prone and suffer much higher mortality than females their own age. They are particularly susceptible to a higher hunting mortality rate than adult bucks due to their daylight-wandering behavior.

2000-2001 AFLATOXIN ALERT

By: Larry Savage, LDWF DMAP Coordinator

An estimated 50% of Louisiana's record 1998-corn crop was infected with the potent biological poison **aflatoxin**. Corn was stressed by record summer drought that created perfect conditions for a large-scale infection of *Aspergillus*, a common soil fungus. Corn that is stressed at the critical pollination-phase of growth is much more likely to become seriously infected and produce aflatoxin.

During the summer of 2000, 1998-like drought conditions have again occurred across much of south Louisiana. Louisiana Department of Agriculture and Forestry testing has revealed above average aflatoxin levels in south-central LA and scattered incidences of elevated aflatoxin over the rest of the state depending on area rainfall.

Deer hunters obtaining corn grown in this area of the state are reminded that aflatoxin is a deadly natural toxin. Toxicity depends on the species of wildlife, the age, health, nutritional status of the animal, as well as, the contamination level and amount of corn eaten. Young animals and birds appear to be more susceptible than mature animals and deer. Symptoms include reduced food intake, damage to internal organs (liver), suppressed immune system and weight loss. An estimated 10,000 geese died from aflatoxicosis caused by contaminated corn during 1998-99 in Louisiana.

The Southeast Cooperative Wildlife Disease Study at the University of Georgia recommends that corn used for supplemental wildlife feeding should not exceed Food and Drug Administration (FDA) levels. FDA sets aflatoxin limits in food and livestock feeds at:

- **20 ppb** – food used by humans, feed for immature animals and dairy animals
- **100 ppb** – feed for breeding cattle, swine and poultry

- **200-300 ppb** – feed for finishing swine and cattle

Test conducted by LDWF and LDAF in 1998 indicated that the safest source of deer corn is retail stores selling corn certified as aflatoxin free. Hunters seeking a cheap source of corn directly from the field may get a short-term bargain but a long-term loss of recreation opportunity if wildlife is exposed to corn contaminated with high levels of aflatoxin.

Hunters statewide are reminded that conditions causing high aflatoxin levels in cornfields occur only rarely under a very narrow set of conditions. **The most frequent source of aflatoxin is good corn that has been mishandled.** Clean corn that is transported or stored at high temperatures and high humidity can produce aflatoxin within 24 hours and biologically significant amounts in a few days. Year in and year out, hunters should be vigilant about the proper transportation, storage, and feeding of corn to avoid the detrimental impacts of aflatoxicosis on all forms of wildlife.

LDWF RECOMMENDATIONS

1. **Just say no to corn feeding.** This is the only way to be absolutely certain that aflatoxin and other mortality factors (predators) associated with supplemental feeding will be eliminated.
2. **Maintain a healthy well-balanced deer herd** by proper application of either-sex harvest. Research on livestock indicates that stress-free well-fed animals are not as susceptible to aflatoxin related disorders as under-nourished animals with additional stress factors (parasites, etc.).
3. **Use only certified corn** that is below 20-ppb aflatoxin.
4. **Do not expose corn to rainfall** during transportation and store it in insect, rodent, and water resistant containers placed in a cool location. Wildlife resources should be treated like prize livestock and fed only the best quality corn.
5. **Use feeders that protect corn** from the

weather and dispense small quantities. Frequent filling of feeders with small hoppers will keep corn fresh. **Do not** use wet or moldy corn.

6. **Frequently move feeders** to reduce the risk of wildlife exposure to secondary diseases and parasites that can contaminate the soil in an area of frequent use.
7. **Terminate your feeding program by February 15th each year.**
8. **Thoroughly clean storage containers and feeders annually.** Remove dirt, old corn and debris and wash with Clorox water at the end of the season.

Turning Forest Openings into Low Maintenance “Mast Plots”

By: Marc “Buddy” Dupuy, III, LDWF Forest Parish Supervisor

When most people talk about getting their food plots ready, they’re referring to an annual ritual of disking, fertilizing, and planting wheat, oats, clover, vetch, etc. Typical food plots can be small areas planted with cool season forage for the primary purpose of being hunted over or they can be large-scale, multi-seasonal, and instrumental in a complete deer management program. The latter, though much more beneficial to the deer herd, is less common primarily because of the cost and time involved in annual maintenance. Is there a way to provide a little extra nutritional supplement throughout much of the year without the annual maintenance? You bet!

There are lots of things that deer relish that don’t have to be planted or maintained annually. I’m talking about the mast (hard and soft) of trees and shrubs. Before you say “who’s got thirty years,” consider the relatively young age at which the following trees and shrubs were producing mast in LDWF hardwood plantations across the state: live oak at age 8; water oak and Nuttall oak

at age 12; white, overcup, willow, burr, and obtusa oaks at age 14; sweet pecan at age 15; black cherry, crab apple, and mayhaw at age 5. These mast production records have recently been documented by LDWF personnel on 20,000 acres of hardwood reforestation on the state’s Wildlife Management Area system.

You don’t have to convert food plots into food orchards. Plant those openings that can’t be disked because of stumps or access problems. Make better long-term use of some of those openings not being used as food plots.



Why do deer utilize food plots? It’s pretty straight forward – you’re providing them with something they either like or need and couldn’t get otherwise. Probably every tract of land in this state is missing at least a few things which deer would utilize but are not growing there. It won’t help much to plant something that is fairly abundant. You’ve got to pick something that is 1) rare or absent, and 2) will grow on that particular site. You can’t plant any kind of tree anywhere. However, just because it is not there already doesn’t mean it won’t grow at least well enough to produce fruit.

Here are a few bits of information that may be helpful. One-year-old bare-root seedlings cost \$18.00 to \$30.00 per one hundred. Most native species can be bought at either the Louisiana Department of Agriculture and Forestry’s state nursery or other private nurseries that sell bare-root seedlings. Planting should be done from mid-

December to mid-March. Weed competition is generally not a problem but don't waste time planting in an opening that is full of head-high saplings. They will overtop planted trees. Make sure seedlings have plenty of sunlight with no trees or limbs directly overhead. It's best to have openings at least ¼ acre in size. Always try to separate the shrubs or slow growers like sweet pecan, from faster growing red oaks. Make sure the roots stay moist from the time seedlings are picked up at the nursery until they get planted. Planting is not difficult but it must be done with care. The root collar should be no higher than ground line, preferably two inches below, and the dibble hole closed completely from top to bottom. Most club members should be able to plant 50 seedlings per hour. You'll probably want to plant about 200 trees per acre (15'x15') unless you intend for these trees to be harvested some day; then 363 trees per acre (12'x10') should be better.

You can provide mast nearly all year long, if your site will grow both spring and summer producers. Sawtooth oak acorns generally mature and drop in September to early October. Most of the other oaks (red and white) mature and drop in November and December. Nuttall oak matures in November but drops slowly throughout the winter into early March. In the spring, mayhaws ripen. In early summer, black cherry, plums, and red mulberry fruit are maturing. By late summer, paw paw and crab apple are available to deer. The persimmon crop is peaking in October (some crabapples may still be edible in early bow season also). This is far from a complete list of the types of mast that deer utilize but you get the idea.

If you don't have extra openings, you can always double-crop your food plots. Plant rows of seedlings on a wide spacing to allow disking. You'll get the benefits of having trees fertilized and cultivated but you will have to deal with more damage from deer browsing or rubbing young trees. There are ways to address these problems.

Mast plots can be particularly attractive on lands adjacent to intensively managed pine plantations where there is an absence of natural

food diversity. They can be placed in natural bottlenecks or near water holes to increase their effectiveness for hunting. Mast plots fit the natural scheme and may be more acceptable to some hunters than artificial feeding. They can also be passed on for the next generation of managers/hunters to enjoy.

Wildlife Division personnel can provide forest/wildlife habitat management recommendations. Interested persons should contact the closest LDWF office. For more information about purchasing seedlings contact Louisiana Department of Agriculture and Forestry (225)-925-4500.

Curtis Parker Retires

Wildlife and Fisheries Technician 4, Curtis Parker, retired in April 2000 after 33 years of service with LDWF Wildlife Division. Curtis worked diligently preparing information packets, counting tags, aging jawbones and drawing maps for the DMAP program at the Region 2 office in Monroe. Curtis helped provide essential assistance to the public, which is the primary mission of the Deer Management Assistance Program. Thanks Curtis – Good Hunting !!!



Deadline for DMAP Records and
Unused Tags to LDWF: March 1st



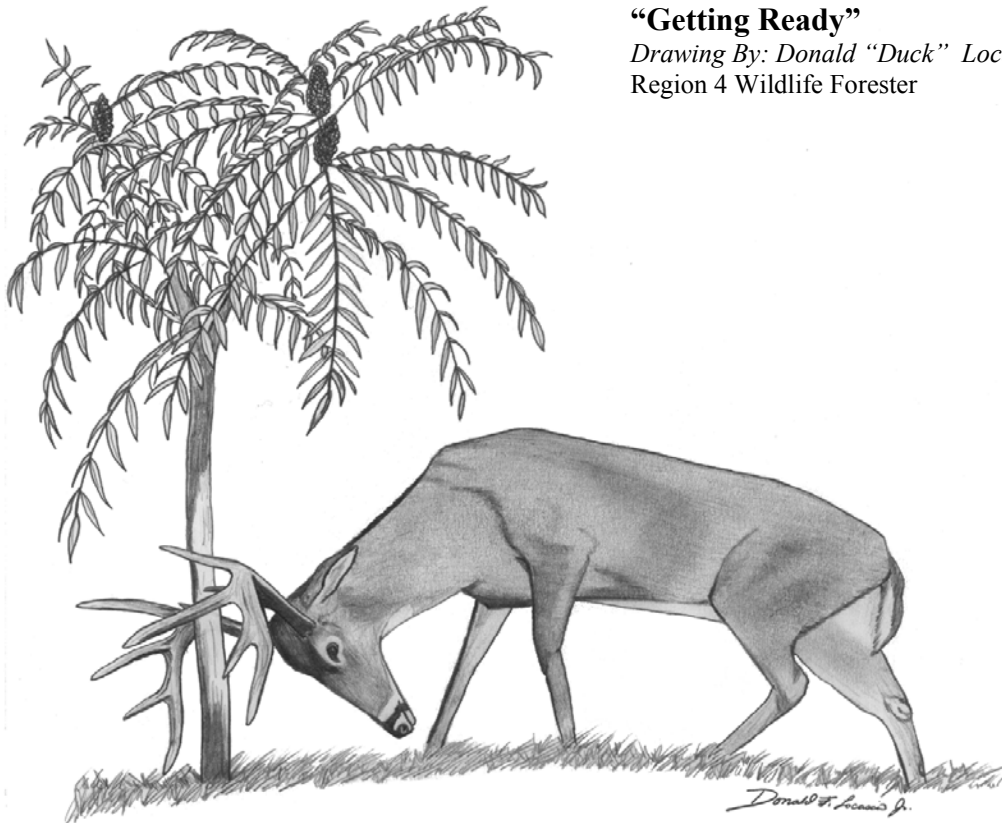
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The DMAP Newsletter is printed twice a year to assist DMAP Cooperators with the intensive management of deer and habitat resources and to enhance the recreational enjoyment derived from these resources. It also updates cooperators with information on the administration of the program. **DMAP contact people**

that receive the newsletter directly are encouraged to pass it to as many of their members as possible. Please forward any questions or comments about DMAP or the DMAP Newsletter to:

Larry Savage, DMAP Coordinator
David Moreland, Deer Research Leader
P.O. Box 98000
Baton Rouge, LA 70898
savage_jl@wlf.state.la.us or (225)765-0823
moreland_dw@wlf.state.la.us or (225)765-2344

Compiled and edited by:
Mike Olinde, Program Manager



"Getting Ready"

*Drawing By: Donald "Duck" Locascio, Jr.
Region 4 Wildlife Forester*

What's happened to our winters?

*By: Jay Grymes / State Climatologist
LA Office of State Climatology
Louisiana State University*

In case you haven't noticed -- the "cold" seasons over the last couple of years have been anything but "cold" -- in fact, they have been remarkably warm. Whether you blame it on La Nina, "global warming", or a tough decade for the Saints, the last couple of winters have been disappointing for many Louisiana outdoorsmen.

The truth is that La Nina is likely to be the primary culprit, but she's not working totally alone. La Nina -- El Nino's "sister" -- is defined by cooler-than-normal water temperatures in the central Pacific. These cool waters change the track of the jet stream over the United States, which alters the number and strength of frontal passages for the Bayou State. (In contrast, El Nino -- marked by warm Pacific waters -- usually increases winter storm frequency in the Gulf of Mexico, which in turn makes for wetter-than-normal winter and springs for much of Louisiana.)

During "strong" La Ninas -- like the one that has been operating since mid-1998 -- south Louisiana has about a 75% to 80% chance of having drier-than-normal winters and springs. But this seasonal rainfall trend is mainly limited to south Louisiana; rainfall patterns are hard to predict for the northern half of the state during La Ninas. Winter and spring temperatures, on the other hand, tend to be on the "warm" side statewide during La Ninas. However, this temperature tendency is not entirely reliable, and some La Nina winters can be chilly ones for the Pelican State.

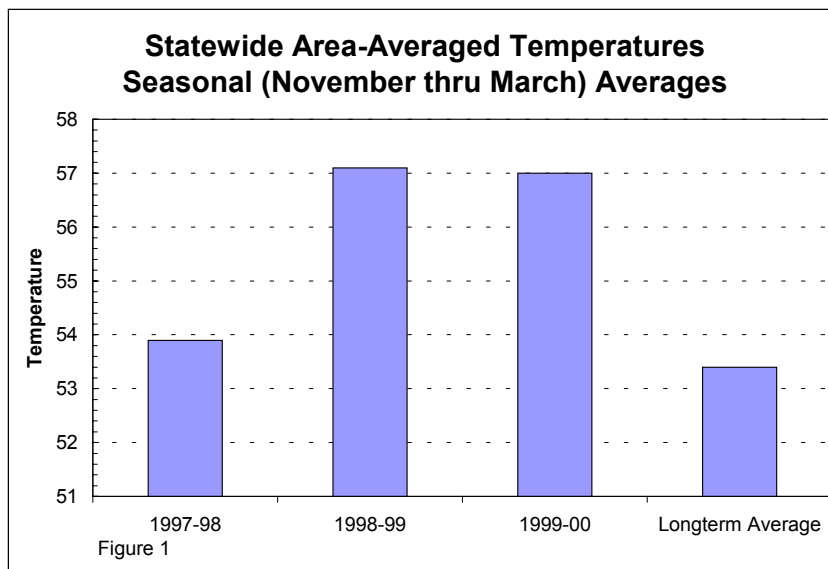
A warm and dry winter and spring may be good for the home budget by lowering heating bills, but it can play havoc with Louisiana's natural environment. Nature can be "confused" by warm winters, and a lack of usual winter rainfall can leave the soils too dry and the plants too stressed for the normal spring bloom.

Such has been the case during the last two winter-spring seasons. A vigorous and long-lasting La Nina has produced back-to-back mild winters, with many south Louisiana parishes suffering through a drought that -- as of September -- has continued through both winters and extended for well over two years!

Winter-Spring Temperatures:

Based on average temperatures from November through March, Louisiana's last two winter-springs (1998-1999 and 1999-2000) were the warmest seasons since the early 1970s, and among some of the warmest in more than 100 years! A look at Figure 1 shows that the average temperatures for the last two seasons (Nov-Mar) were about 3° above the normal. At first, that doesn't seem to be an unusually large difference, but it turns out that the 1998-1999 winter-spring ranks among the ten "warmest" since the 1890s, with the 1999-2000 season coming right behind.

For the winter months (Dec-thru-Feb), 1998-1999 ranked among the all-time warm winters, averaging 5° above the winter norm! Although the 1999-2000 winter months didn't approach the record levels of the previous winter, it still was among the top third of all years in terms of average temperatures. Indeed, the 1999-2000 winter would have been ranked much higher had it not been for a brief run of very cold weather in late January.

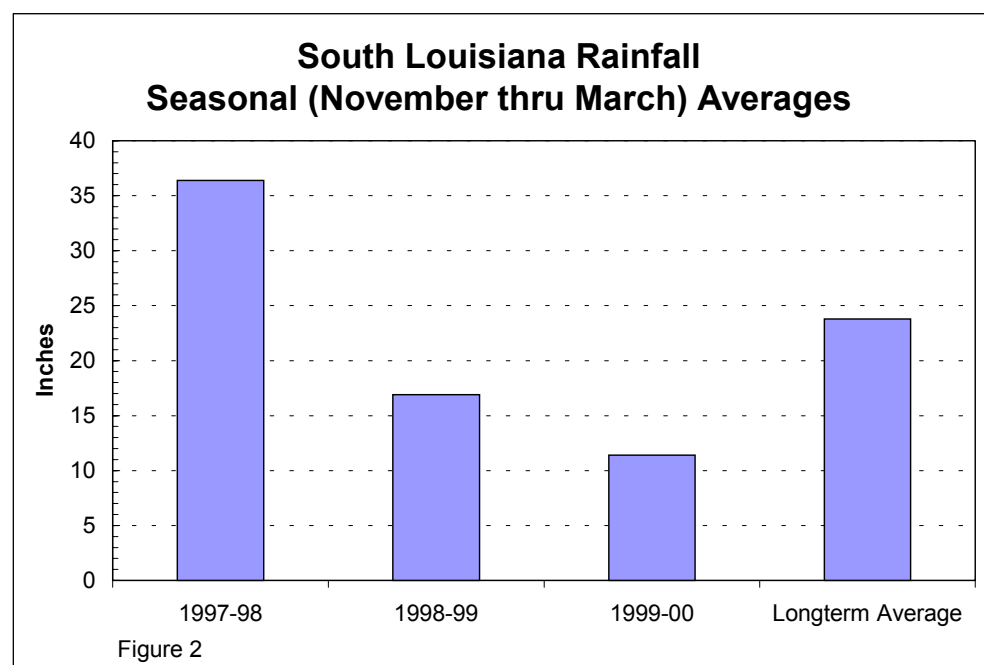


Numbers of freeze-days can also serve as a measure of “mild” weather during the last two winter-springs. Normally, northern parishes experience 35 to 40 days each winter-spring with temperatures dipping to -- or below -- freezing. Even across south Louisiana -- with the exception of the coastal margins and inland lake shorelines -- a freeze can be expected on a dozen days or more.

Such was not the case in either of the past two “cold” seasons. For the 1999-2000 winter-spring, Shreveport reported only 26 freeze days. Although Lake Charles did report a dozen freezes, New Orleans only had 3 brief freezes -- more like 12 hours for the season rather than 12 days! And the 1998-1999 season had even fewer events across the state: although New Orleans reported 4 freeze days -- up one from the previous season, Shreveport recorded only 20 freeze days and Lake Charles reported only nine!

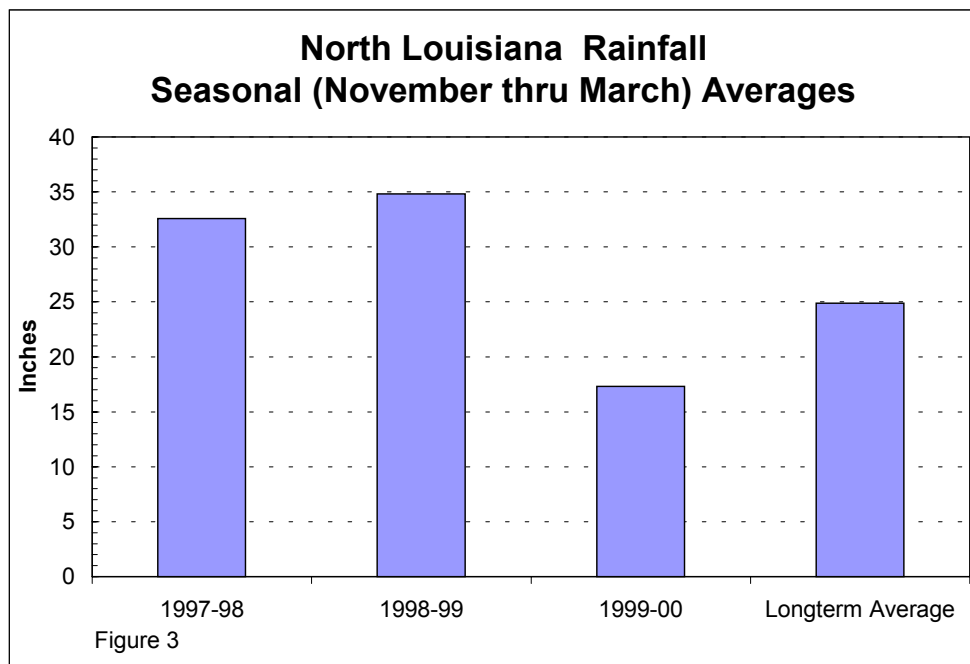
Winter-Spring Rainfall:

La Nina has certainly produced back-to-back dry winter-springs for south Louisiana (Fig. 2). November-through-March (5-month) rainfall for the southern parishes normally averages about 20" to 25". Not true for the 1998-1999 season, where most parishes in the southern third of the state averaged only 15" to 20" for the period. The 1999-2000 winter-spring was even worse: totals across the southern half of Louisiana ranged from only 15" down to less than 10" for the 5-



month period, ranking among the driest all-time November-March totals for many southern parishes. Indeed, as of September, virtually the entire southeastern quarter of the state is still suffering “extreme” drought, with record-breaking annual and two-year low totals throughout that region.

But La Nina’s peculiar rainfall pattern is also evident during the past two seasons. While 1998-1999 was unusually dry for the southern third of the state, the northern third of Louisiana experienced one of its ten “wettest” November-through-March periods ever (Fig. 3)! The 1999-2000 winter-spring was much different: although northern Louisiana did not experience the record and near-record dry pattern reported across the southern parishes, all of northern Louisiana was drier-than-normal, with most parishes north of Alexandria recording under 20" for the season.



The unusually dry weather statewide, coupled with warmer-than-normal weather throughout the current year, has left most of the natural vegetation in terrible shape, with soils as dry (or drier) than anyone can remember.

The Outlook:

Given the current shape of Louisiana’s marshes, woodlands and pastures, it will almost certainly be months before nature can rebound from the drought stress. And that’s assuming that the persistent warm-and-dry pattern of the last two years will change to something a bit more “normal”.

Well -- the outlook is promising. First, all signs are that La Nina is about to call it quits, and hopefully go on a long vacation. The Pacific waters are warming -- maybe even headed for a mild El Nino. Current long-range (3 to 6 month) projections call for a return to a more typical -- or even slightly “wet” -- weather pattern during the upcoming months.

That’s the best news. Unfortunately, don’t look for a “cold” winter season. Long-range forecasters are calling for a “near-normal to mild” winter and spring for Louisiana. However, there are some indications that the upcoming season won’t be quite as warm as the last two -- so even that offers a little hope.

Remember, even mild winters normally have one or more good freeze events, although they may be rather brief. But the timing of these events -- that’s very difficult to anticipate more than a few days in advance. Which means pinpointing the date of the first “frost on the pumpkin” is all but impossible.

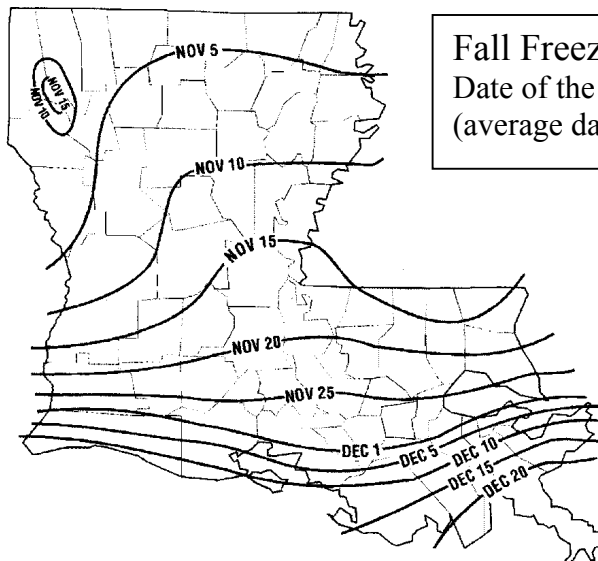
The Fall Freeze map suggests that about half the state normally has its first freeze by mid-November, with the coastal parishes averaging a first freeze near December 1st. Based on projections for the upcoming season, plan on that first freeze arriving late this season.

So if it's been a couple of tough years on the hunting trails, it's probably a result of Mother Nature just throwing a little temper(ature) tantrum?

Special
Thanks to Jay
Grymes, State
Climatologist
for his
contribution.



Southern Regional
Climate Center



Fall Freeze
Date of the 50% probability
(average date) for the 1st fall freeze

Louisiana Department of Wildlife and Fisheries
P.O. Box 98000
Baton Rouge, LA 70898

